SCAR working group on Glaciology

# National report from Sweden for the period 2000-2002

During this two year period glaciological research has been performed within international frameworks (EPICA and ITASE). The last Swedish glaciological expedition was in 1999/2000 and the next one is planned for the season 2002/03. Participation at North Grip is excluded in this compilation though that project is strongly linked to the Antarctic programmes.

2000/01	DML	High resolution radar soundings and short firn coring on spatial distribution of snow in the coastal area of western Dronning Maud Land was sampled in January and February within ITASE. Field work stationed at the Wasa station
	Dome C	Ion analyses of deep ice core from Dome C within EPICA-WP6. No participation in the field campaign.
2001/02	Dome C	Ion analyses of deep ice core from Dome C within EPICA-WP6. Participation with one scientist at the drill site at Dome C.
	DML	A planned field trip for radar and GPS measurements at DML was cancelled due to changes in logistic programme.
	James Ross	A planned joint Argentinean-Swedish field trip to James Ross Island, to execute balanced flux studies on valley glaciers, was cancelled due to financial and thus logistic problems in Argentina. The field party was aimed to not only study mass balance but also how specific morainic features are formed. The field trip was postponed. There is no new date set for this field work.

## Active Swedish institutes in Antarctic glaciology 2000-2002.

Department of Physical Geography and Quaternary Geology, Stockholm University Department of Geology, Stockholm University Department of Meteorology, Stockholm University Department of Physical Geography, Uppsala University

#### **Recent doctoral theses**

Malin Stenberg 2000: Spatial variability and temporal changes in snow chemistry, Dronning Maud Land, Antarctica. Department of Physical Geography and Quaternary Geology, Stockholm University, Dissertation series (ISSN- 1650-4992), Dissertation no. 15

Cecilia Richardson-Nåslund 2001. Spatial distribution of snow in Antarctica and other glacier studies using ggound-penetrating radar. Department of Physical Geography and

Quaternary Geology, Stockholm University, Dissertation series (ISSN-1650-4992), Dissertation no.18

#### **Plans for 2002/03**

Dome C Ion analyses of deep ice core samples from Dome C within

EPICA- WP6. No participation of any Swedish scientist at the

drill site at Dome C.

DML Ion analyses of deep ice core samples from EPICA-DML

(EPICA WP6). Unclear whether or not any Swede will

participate in drillings at DML.

Data sampling on accumulation rates and ice velocities for

EPICA WP7 and ITASE.

Radar soundings at coastline for the GLOCHANT -ISMASS

project. Balanced flow on outlet glaciers..

Initiation of monitoring programmes on snow accumulation,

climate and atmospheric chemistry.

### **Future plan 2003-2006**

Traverse EPICA-DML -Dome Fuji.

Take part in EPICA-DML drilling and processing Finish mass budget study of coastal area of DML Run monitoring programme

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